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# Southeast Fisheries Science Center

Overview and context of data collection  
function

June 2013



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## What We Do

**MISSION:** Stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems.

- Stock and population assessments of living marine resources
- Socioeconomic studies
- Habitat research and monitoring
- Life history studies
- Process studies (climate change, ecosystem approaches)
- Gear engineering for bycatch reduction
- Research to improve efficiency and effectiveness of above



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## SEFSC Geography

- Beaufort Laboratory, Beaufort , NC
- Miami Laboratory, Miami, FL – Center HQ
- Panama City Laboratory, Panama City, FL
- Mississippi Laboratories, Pascagoula & Stennis, Mississippi
- Galveston Laboratory, Galveston, TX & Lafayette, LA



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# SEFSC Stock Assessment Responsibilities

- Three Large Marine Ecosystems (LMEs):
  - U.S. South Atlantic (North Carolina to Florida Keys)
  - U.S. Gulf of Mexico (Florida Keys to Texas)
  - U.S. Caribbean Sea (Puerto Rico and U.S. Virgin Islands)
- Three + fishery management councils representing the LMEs:
  - South Atlantic Fishery Management Council
  - Gulf of Mexico Fishery Management Council
  - Caribbean Fishery Management Council
  - Highly Migratory Species (HMS) Division functions as a council to manage domestic HMS
- International Atlantic
  - High seas stocks managed by International Commission for the Conservation of Atlantic Tunas (ICCAT)

# SEFSC Facilities and Regions of Responsibility







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## Data Collection Partners

- Gulf States Commission
- Atlantic States Commission
- States and Territories
- Industry collaborators
- Academic researchers
- Environmental NGOs



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## Managers Using Data and Stock Assessments

- South Atlantic Fishery Management Council
- Gulf of Mexico Fishery Management Council
- Caribbean Fishery Management Council
- Atlantic States Marine Fisheries Commission
- Gulf States Marine Fisheries Commission
- Highly Migratory Species Division
- NMFS Southeast Regional Office (SERO)



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# Data Inputs to Stock Assessments

- Three broad categories of data collection and analysis that support stock assessments:
  - Fishery-dependent data collected by states, territories and NOAA Fisheries
  - Fishery-independent data collected by states and NMFS and through cooperative research with academic and industry partners
  - Biological measurements and samples for life history information
  - Special investigations and surveys



# Assessment/Data Collection Challenges



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- Large number of moderate to small stocks (species diversity latitudinal gradient)
- International trans-boundary stocks
- Habitat diversity - requires gear innovations within industry and survey fleet
- Large recreational fleet with high activity
- Over reliance on fishery-dependent data
- Evolving fisheries
- Need for process studies to evolve to ecosystem approaches

# Review Challenges



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- Review SEFSC data collection systems
  - Fishery-dependent
  - Fishery-independent
  - Bioprofile sampling and processing
  - Partnership data collection systems
- Evaluate effectiveness and efficiencies of data collection systems
- Develop recommendations to guide SEFC and agency in allocating resources that produce the best available scientific information for stock assessments in each LME